REMARKS

Claims 1-6 and 8-18, 20 and 21 are currently pending in the application. By this amendment, claims 1, 9 and 21 are amended. Support for the amendment(s) is provided in the specification on page 5, lines 1-3. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

35 U.S.C. § 103 Rejection

Claims 1-6, 8-18, 20 and 21 were rejected under 35 U.S.C. § 103(a) for being unpatentable over U.S. Patent No. 6,366,289 B1 issued to JOHNS in view of U.S. Patent No. 6,567,081 B1 issued to LI et al. ("LI"). Applicant respectfully traverses this rejection.

The claimed invention is directed towards selectively decompressing compressed graphic image data in a selected coverage section. Thus, for example, page 5, lines 1-3 discloses that files are loaded into memory in compressed format which consumes less memory than their decompressed counterpart. In the embodiments of the invention, the selected coverage section is overhead data which may include a coverage section, for example, the geographical extent of the data using latitude and longitude vertices and decompressing data based on these vertices. As noted at page 8 of the specification, decompression of data for an area of interest can typically be performed more quickly than decompression of an entire tile, and much more quickly than loading a file containing the data from a disk. The decompressed portion is relevant data which is the data of interest.

By way of example, claim 1, recites, in part, a system for displaying a graphic image of interest based exclusively on compressed graphic image data, wherein the system includes

> means for selectively decompressing a portion of said compressed graphic image data as stored in the memory based on a selected coverage section of the graphical image data, said portion including only data corresponding to the graphic image of interest and display means for displaying the graphic image of interest based exclusively on the portion of the compressed graphic image data as decompressed.

Independent claim 9 recites a method for displaying a requested graphic image from data included in a compressed graphic image data file and includes decompressing a portion of the file, where the portion includes only data for the requested graphic image based on a selected geographical region and generating the requested graphic image on a display device based exclusively on the data as decompressed and which is sent to the frame buffer.

Additionally, independent claim 14 recites, in part,

> loading the file that includes compressed data for the first area of interest from the storage device into memory, wherein the compressed data includes overhead data that defines a geographical extent of the file, the overhead data includes latitude and longitude vertices.

Finally, independent claim 21 recites, in part,

> means for storing only compressed graphic image data in memory and display means for displaying the graphic image of interest based exclusively on the portion of the compressed graphic image data as decompressed.

Applicant submits that the combination of references, as presented by the Examiner, does not establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103 (a), three basic criteria must be met. Referring to MPEP § 2143,

> "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations.
>
> The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not applicant's disclosure." (emphasis added).

The Examiner admits that JOHNS is materially deficient as it "is silent about where the selective decompression of image data is based on selected coverage section of the graphical image data." However, the Examiner uses the teachings of LI to cure these deficiencies of JOHNS. In particular, the Examiner is of the opinion that LI discloses selective decompression of only relevant image data based on the disclosure of col. 5, lines 39-67 and col. 6, lines 1-5. (Office Action at p. 3.)

JOHNS is directed towards a virtual frame buffer controller in a computer display system for managing a display image in compressed and uncompressed blocks. JOHNS discloses the VFB controller indicates to the host when free memory is running low. The host, in turn, interacts with the display controller to re-compress least recently used chunks. *See* col. 8, lines 11-14. To compress the information which is not used frequently, the VFB controller indicates to the host when free memory is running low. The host, in turn, interacts with the display controller to re-compress least recently used chunks. The foregoing illustrates the intended purpose of JOHNS (e.g., to randomly decompress chunks of data). Finally, JOHNS specifically utilizes both compressed and uncompressed stored data to produce an image. See, for example, col. 5, lines 58-61 and col. 7, lines 55-56.

JOHNS does not disclose or suggest producing a graphical image from one or portions which are based exclusively from compressed data. Applicant further notes, in particular, that the Examiner has not identified any language in JOHNS which discloses or suggests overhead data which includes latitude and longitude vertices.

LI is directed towards compressing data in order to allow it to be easily transported and so that portions can be selectively decompressed to render 2D views of a 3D scene. For example, col. 3, lines 25-33 discloses:

> Methods and arrangements are provided for substantially reducing the amount of data, such as, e.g., COM data, required to be generated, stored, transported, or otherwise accessed in rendering a three-dimensional (3D) scene. The methods and arrangements compress image-based rendering (IBR) data using alignment and 3D wavelet transform techniques. The compressed data can be easily transported and portions can be selectively decompressed to render various two-dimensional (2D) views of the 3D scene.

LI discloses how this occurs at col. 3, lines 42-56, which indicates

> Here, a compression engine compresses the IBR data using a 3D wavelet transform and outputs a compressed bitstream that includes encoded frequency coefficients associated with the IBR data. This compressed bitstream is then provided (e.g., transported, etc.) to a decompression engine that selectively decodes portions of the compressed bitstream based on an access request for image data associated with the desired view from a rendering engine. The decompression engine decompresses the decoded portions using an inverse wavelet transform, and provides the decompressed IBR data to the rendering engine. The rendering engine is therefore able to render the decompressed IBR data without having to have the entire IBR bitstream decoded and decompressed at any one time.

Such language in LI, however, does not disclose or suggest a system or method for displaying a graphic image of interest based exclusively on compressed graphic image data. Applicant further notes, in particular, that the Examiner has not identified any language in LI which discloses or suggests overhead data which includes latitude and longitude vertices. LI does not indicate that portions of only compressed data are decompressed, much less, that such portions are based on a selected coverage section of the graphical image data.

Applicant also submits that there is no reasonable expectation of success for the combination. The Examiner has done nothing to support the combination. That is, to show motivation, in accordance with MPEP § 2143.02,

> The ...suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." 270 F.2d at 813, 123 USPQ at 352.). (emphasis added.)

In the present rejection, the combination of JOHNS with LI requires a substantial reconstruction and redesign of the elements shown in JOHNS as well as a change in the basic principle under which the JOHNS construction was designed to operate. More specifically, LI discloses a compression engine that compresses IBR data using a 3D wavelet transform and outputs a compressed bitstream that includes encoded frequency coefficients associated with the IBR data. This compressed bitstream is then provided (e.g., transported, etc.) to a decompression engine that selectively decodes portions of the compressed bitstream based on an access request for image data associated with the desired view from a rendering engine. *See* col. 3, lines 42-50.

JOHNS functions in a completely differently way. JOHNS discloses storing each of the chunks stored as a discrete block of memory distributed randomly in one or more memory devices. *See* col. 7, lines 5-7. Since the chunks are stored randomly, the decompressing will also be performed by choosing the random chunks. Additionally, to decompress randomly, for example, JOHNS discloses at column 8, lines 26-38:

> The display controller also manages the process of refreshing the display screen from the primary display image managed by the VFB controller and possibly other images. In particular, a compositor 330 retrieves the chunks that make up the display image from memory (e.g., the local video memory 310) and temporarily holds them in a compositing buffer. For compressed chunks, the compositor instructs a decompressor 332 to decompress the chunk and place it in the compositing buffer. The compositor uses a double buffering scheme to scan one set of output pixels to the display 334 from one buffer, while constructing another set of output pixels in another.

However, such a combination of LI and JOHNS would require a complete redesign of JOHNS and would be directed away from JOHNS intended purpose. The combination is, at best incompatable, and is believed to be improper as the complete internal operational logic of JOHNS would have to be completely modified to perform the teachings of LI. There is simply no teaching in LI for this substantial reconstruction and redesign of the elements shown in JOHNS as well as a change in the basic principle under which the JOHNS construction was designed to operate.

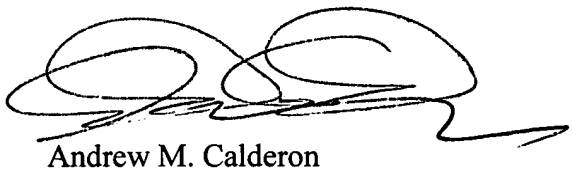
For at least the foregoing reasons Applicant respectfully requests that the rejection under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

In view of the foregoing remarks and amendments, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,
Marc A. BLAIS



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